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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,096	08/06/2001	Sten Frolich	AN06187US/3161	9489

7590 08/11/2004

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Dobbs Ferry, NY 10522-3408

EXAMINER
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CHIN, PETER

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/923,096		FROLICH ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Peter Chin		1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 May 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10,12,14-21,23-26,28,30-40,42 and 44-67 is/are pending in the application.
- 4a) Of the above claim(s) 3,7,9,20-23,30-36 and 44-61 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8,10,12,14-19,24-26,28,37-40,42,62-67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. Claim 14 is rejected under 35 U.S.C. 102(b) as anticipated by Begala ((5,595,629).

Begala anticipates the claimed invention as noted in the previous Office Action, mailed 12/18/2003.

2. Claims 1,2,4-6,8,10,12,14-19,24-26,28,37-40,42,62-67 rejected under 35 U.S.C. 103(a) as being unpatentable over Persson et al (WO 9955964) in view of Begala et al (5,595,629).

The claims are rejected for the reasons given in the previous Office Action, mailed 12/18/2003. In regard to newly added claims 62 and 66, Persson discloses the addition of an additional low molecular weight cationic polymer, last paragraph of page 7.

3. Applicant's arguments have been considered but are deemed unpersuasive of patentability.

The arguments relating to Begala as it relates to claim 14 are more specific than the claim. Begala anticipates the invention claimed in claim 14.

Persson clearly discloses that anionic condensation polymers such as melamine-sulfonic acid sols are useful as the anionic particulate and alternative to silica particles. Begala teaches that the claimed naphthalene sulfonate condensation polymer when used in conjunction with a cationic polymer will improve retention, drainage and formation. Such teaching supplies motivation to employ the claimed condensation polymer as the anionic condensation polymer in Persson.

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The Solhage Declaration submitted on May 21, 2004 does provide probative evidence of unexpectedness of the invention over Persson's invention. However, the claims are not commensurate with the showing. The showing is limited to a cationic starch having one or more cationic aromatic groups, the cationic moiety being a quaternary ammonium group. The only anionic polymer having one or more aromatic group is a formaldehyde-naphthalene sulfonate condensate. There is no evidence that other classes of cationic polysaccharides and anionic polymers containing one or more aromatic groups would also reasonably expect to exhibit unexpected properties over Persson. Therefore if the claims were amended to be limited to these two groups of polymers, the claims would be allowable.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

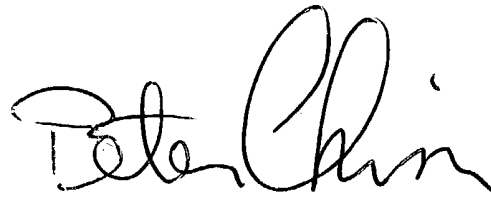
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Chin whose telephone number is (571) 272-1186. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Peter Chin". The signature is fluid and cursive, with the first name "Peter" and last name "Chin" clearly distinguishable.

Peter Chin  
Primary Examiner  
Art Unit 1731